

CLAIMS:

1. An integrated carrier having; a base member of a long and slender shape such as a filament, a braid, or tape, with various substances for detection having predetermined chemical structures fixed thereto so as to be lined up along a longitudinal direction thereof with each of the chemical structures associated with their fixed positions, and a carrier with said base member rolled therearound with each of the fixed positions exposed outwards.

2. A device for containing, reacting and measuring having;
a transparent container section having a liquid inlet/outlet and which is able to contain a base member with various substances for detection having predetermined chemical structures fixed at respective fixed positions which are arranged in a predetermined condition, and with each of the chemical structures associated with each of the fixed positions,

a drawing and discharging section which is able to draw and discharge said liquid into and from the container section via said inlet/outlet, and

a measuring device which is able to receive light from the contained base member, external to said container section and in a condition associated with said fixed position.

3. A device for containing, reacting and measuring according to claim 2, wherein said measuring device has a light receiving section for receiving light from said base member, and a scanning section for relatively moving said light receiving section and said container section and scanning each fixed position of said base member.

4. A device for containing, reacting and measuring according to claim 2, wherein said container section is removably mounted on a nozzle section provided in said drawing and discharging section.

5. A device for containing, reacting and measuring according to claim 2, further having a moving section which is capable of relatively moving said inlet/outlet and a processing area where externally provided containers or the like are mounted.

Automatic
System
Various
Sample

6. A device for containing, reacting and measuring according to claim 2, further having an identification section for performing identification of said target substance based on an identification pattern obtained by scanning with said measuring device an area containing all fixed positions of said base member which have been formed by combining labeled target substances with substances for detection.

7. A device for containing, reacting and measuring according to claim 2, wherein said base member is formed in a long and slender shape such as a filament shape, a braid shape, or a tape shape, and the substances for detection are lined up and fixed along a longitudinal direction thereof, and in the case where said base member is contained in a linearly extended condition, said container section is a slender tube, and said base member is contained with the longitudinal direction thereof along the axial direction of the slender tube, and the size and shape of the slender tube is determined based on the size and shape of the base member, and said measuring device measures by scanning along the axial direction of said slender tube.

8. A device for containing, reacting and measuring according to claim 2, wherein said base member is formed in a long and slender shape such as a filament shape, a braid shape, or a tape shape, with various substances for detection having predetermined chemical structures lined up and fixed along the longitudinal direction, with each chemical structure associated with the fixed positions thereof, and in the case where said base member forms an integrated carrier rolled on the surface of the carrier with the respective fixed positions exposed outward, said container section comprises a large diameter section for containing said integrated carrier and a small diameter section having an inlet/outlet at a tip end and capable of insertion into an external container, and said drawing and discharging section draws and discharges said liquid into and from said large diameter section via said inlet/outlet, and the size and shape of said container section is determined based on the size and shape of said integrated carrier, and said measuring device receives light from the base member external to said large diameter section.

9. A device for containing, reacting and measuring according to claim 3, wherein said light receiving section of said measuring device is provided inside a light shielding box, and said light shielding box has a box body and a cover provided so as to cover

an opening of said box body, and has opening provided in said cover to allow said container section to pass therethrough in order to insert said container section into said box body, and closure means which covers said opening to form a closure space with said container section inserted into said box body.

10. A device for containing, reacting and measuring according to claim 8, wherein said integrated carrier on which said base member is rolled, is contained in a condition with said rolled base member positioned so as not to come in contact with an internal surface of said container section.

11. A method of containing, reacting and measuring having:

a containing step for containing in a transparent container, a base member of a long and slender shape such as a filament, a braid, or tape, with various substances for detection having predetermined chemical structures fixed thereto along a longitudinal direction with each of the chemical structures associated with their fixed positions;

a reaction step for drawing a liquid suspending a labeled target substance to inside said container section and immersing said base member in said liquid to react said target substance with said substance for detection;

a measurement preparation step for removing said liquid and any target substance which has not contributed to the reaction; and

a measurement step for measuring light from the base member contained in said container section.

12. A method of containing, reacting and measuring according to claim 11, wherein said measurement step scans all fixed positions of said base member by relatively moving said container section or a light receiving position.

13. A method of containing, reacting and measuring according to claim 11, wherein in said measurement preparation step there is included a step for drawing measurement liquid after removing target substances which have not contributed to reaction and liquid suspending these, and said measurement step measures in a condition with said base member immersed in measurement liquid.

14. A method of etc according to claim 11, wherein in said reaction step, said container section is shaken, or drawing and discharging is repeated.

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